



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,350	08/13/2001	Arnaud Doat	PF 93 PCT US	8605
25666	7590	05/27/2005	EXAMINER	
THE FIRM OF HUESCHEN AND SAGE 500 COLUMBIA PLAZA 350 EAST MICHIGAN AVENUE KALAMAZOO, MI 49007			CHIN, RANDALL E	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/913,350

Applicant(s)

DOAT, ARNAUD

Examiner

Randall Chin

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-35 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-26, 29-35 and 37-40 is/are rejected.
- 7) ☒ Claim(s) 27 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 20-26, 29-35, 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lodato '796 in view of Switzerland 180027.

The patent to Lodato '796 discloses with respect to claim 20 in Fig. 1 and 2A-2C, for example, a toothbrush 10 of elongate form, comprising bristles 16 wherein the toothbrush has, on a flat horizontal support 20, at least one position of stable equilibrium (col. 1, lines 20-36) and wherein in any position of stable equilibrium of the toothbrush on the support, the longitudinal direction of the brush is essentially parallel to the support and the bristles lie at a distance from the support. The patent to Lodato '796

Art Unit: 1744

teaches all of the recited subject matter with the exception of the bristles extending **towards** the support. Switzerland 180027 discloses a toothbrush arrangement wherein bristles could extend either towards, away or partially away (i.e., side arrangement of Fig. 3) from a horizontal support when not in use. It would have been obvious to one of ordinary skill in the art to have modified Lodato's bristle arrangement such that the bristles extend **towards** the support (see Fig. 2) as suggested by Switzerland 180027 for permitting improved drainage of water by gravity of the bristles and thus drying after use.

It should also be noted that even without a secondary teaching reference, the teaching of Lodato, **by itself**, would still be deemed to teach or suggest the bristles extending **toward** the support in order to avoid contamination. It should be noted that one of Lodato's main goals throughout is to provide for a self-righting toothbrush that locates the head (along with bristles) **away** from the flat surface upon which the toothbrush rests for hygienic reasons (col. 1, lines 20-24 and 32-36, col. 2, lines 14-18 and 39-41, col. 3, lines 24-25 and 63-64, and col. 5, lines 19-21). Further, note that Lodato **explicitly** recites that in the embodiments of Figs. 1-5, elevation is more important to avoid contamination from the surface 20 than is the orientation of the bristles (col. 5, lines 18-21). In other words, the main goal of Lodato's self-righting brush is to ensure the bristles are elevated a distance away from the support to avoid contamination. One skilled in the art, from this, recognizes the bristles could actually be directed in any orientation as long as the head is a distance from the support surface. The mere fact that Lodato may not explicitly recite that the bristles can extend **towards**

Art Unit: 1744

the support does not mean that this arrangement is non-obvious to one skilled in the art in view of the overall thrust of Lodato. To assert that one skilled in the art could never recognize an arrangement where the bristles extend **towards** the support in the self-righting toothbrush of Lodato is unpersuasive. The mere fact that Lodato does not recite or show bristles extending towards the support does not mean that such an arrangement is non-obvious. The level of one skilled in the art would be undermined if one were to assert that one of ordinary skill could never come up with the idea of extending the bristles towards the support as opposed to away in Lodato. Clearly, whether the bristles actually extend away, towards or even to the side in Lodato, the Lodato self-righting toothbrush would still operate the same way. The intended operation and effect of Lodato's self-righting toothbrush would not change. In any case, Switzerland 180027 has been applied as a secondary reference to show a suggested orientation for bristles such that they could extend towards a support surface as opposed to away from one. The whole idea is to avoid contamination of the bristles.

As for claim 21, there is only one position of stable equilibrium.

As for claim 22, there is a distal portion B and a proximal portion A extending between the bristles and distal portion in the longitudinal direction, and an intermediate portion therebetween such that the distal and proximal portions constitute the portions of contact of the toothbrush with the flat support and the intermediate portion lying at a distance for the support.

As for claims 23 and 24, there would be only a single point of contact of the proximal portion with the support in the position of stable equilibrium.

As for claim 25, the proximal portion is deemed to be of generally flat shape even at a point.

Similarly, the proximal portion is of a generally flat shape (at the point) in a plane essentially perpendicular to the longitudinal direction of the brush as recited in claim 26.

As for claim 29, the proximal portion A projects from a side of the handle opposite another side of the handle supporting the bristles in the modified Lodato device.

As for claim 30, the proximal portion projects from the handle all the way around the longitudinal axis of the toothbrush.

As for claims 31 and 32, in a broad sense, the proximal portion forms with the handle a "re-entrant" edge on a side of the proximal portion situated toward the bristles or distal portion. Any portion can be considered an "edge."

As for claim 33, it is obvious to make the proximal portion with an elastomeric outer face to facilitate gripping of the handle and for added comfort to a user.

As for claim 34, the Fig. 3 Lodato embodiment teaches the distal portion exhibiting two points of contact (albeit, an infinite number) with the support in one position of stable equilibrium.

As for claim 35, the distal portion in Fig. 3 has a flat part generally parallel to the longitudinal direction of the brush.

The modified Lodato device (i.e., in combination with Switzerland 180027) teaches a toothbrush of elongate form, comprising bristles wherein when the toothbrush is placed in any initial position on a flat horizontal support, the toothbrush will

Art Unit: 1744

spontaneously adopt a stable position in which the longitudinal direction of the brush is essentially parallel to the support and the bristles lie at a distance from the support and extend towards the support.

As for claim 38, the stable position or orientation will always be the same, whatever the initial position will be.

The modified Lodato device (i.e., in combination with Switzerland 180027) also meets newly added claims 39 and 40 for similar reasons as mentioned above.

Allowable Subject Matter

4. Claims 27 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Applicant's arguments filed 29 April 2005 have been fully considered but they are not persuasive.

Applicant's arguments have been considered. The rejection to Cano '190 has been withdrawn in view of Applicant's remarks.

As for Lodato '796, as stated above, it would have been obvious to one of ordinary skill in the art to have modified Lodato's bristle arrangement such that the bristles extend towards the support as suggested by Switzerland 180027 for the purposes of preventing the bristles from coming into contact with other objects or just to

Art Unit: 1744

simply permit improved drainage of water by gravity from the bristles after usage. It will be pointed out that Lodato '796, the primary reference applied, clearly teaches a toothbrush having or exhibiting only one position of equilibrium. To have simply modified Lodato such that the bristles actually extend **towards the support** as opposed to away from it is within the level of one skilled in the art given the teaching to Switzerland 180027. In response to applicant's argument that there is no suggestion to combine the Lodato '796 and Switzerland 180027, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA) 1969. In this case, given Switzerland 180027 and Lodato '796, taken as a whole, orienting the bristles **towards the support** would be obvious for purposes of preventing the bristles from coming into contact with other objects or just to simply permit improved drainage of water by gravity from the bristles after usage. Switzerland 180027 simply teaches various alternative bristle configurations or orientations. To state that when viewing

Art Unit: 1744

Switzerland 180027 and Lodato '796, **taken as a whole**, one skilled in the art would never realize orienting Lodato's bristles so they can extend towards the support as opposed to away from the support is unreasonable and unconvincing, particularly in view of the fact that Switzerland 180027 already teaches various positions that the bristles could be oriented when at rest on a support.

It should also be noted that even without a secondary teaching reference, the teaching of Lodato, **by itself**, would still be deemed to teach or suggest the bristles extending **toward** the support in order to avoid contamination. It should be noted that one of Lodato's main goals throughout is to provide for a self-righting toothbrush that locates the head (along with bristles) **away** from the flat surface upon which the toothbrush rests for hygienic reasons (col. 1, lines 20-24 and 32-36, col. 2, lines 14-18 and 39-41, col. 3, lines 24-25 and 63-64, and col. 5, lines 19-21). Further, note that Lodato **explicitly** recites that in the embodiments of Figs. 1-5, elevation is more important to avoid contamination from the surface 20 than is the orientation of the bristles (col. 5, lines 18-21). In other words, the main goal of Lodato's self-righting brush is to ensure the bristles are elevated a distance away from the support to avoid contamination. One skilled in the art, from this, recognizes the bristles could actually be directed in any orientation as long as the head is a distance from the support surface. The mere fact that Lodato may not explicitly recite that the bristles can extend towards the support does not mean that this arrangement is non-obvious to one skilled in the art in view of the overall thrust of Lodato. To assert that one skilled in the art could never recognize an arrangement where the bristles extend **towards** the support in the self-

Art Unit: 1744

righting toothbrush of Lodato is unpersuasive. The mere fact that Lodato does not recite or show bristles extending towards the support does not mean that such an arrangement is non-obvious. The level of one skilled in the art would be undermined if one were to assert that one of ordinary skill could never come up with the idea of extending the bristles towards the support as opposed to away in Lodato. Clearly, whether the bristles actually extend away, towards or even to the side in Lodato, the Lodato self-righting toothbrush would still operate the same way. The intended operation and effect of Lodato's self-righting toothbrush would not change. In any case, Switzerland 180027 has been applied as a secondary reference to show a suggested orientation for bristles such that they could extend towards a support surface as opposed to away from one. The whole idea is to avoid contamination of the bristles.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1744

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, John Kim, can be reached at (571) 272-1124. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


R. Chin


Randall Chin
Primary Examiner
AU 1744